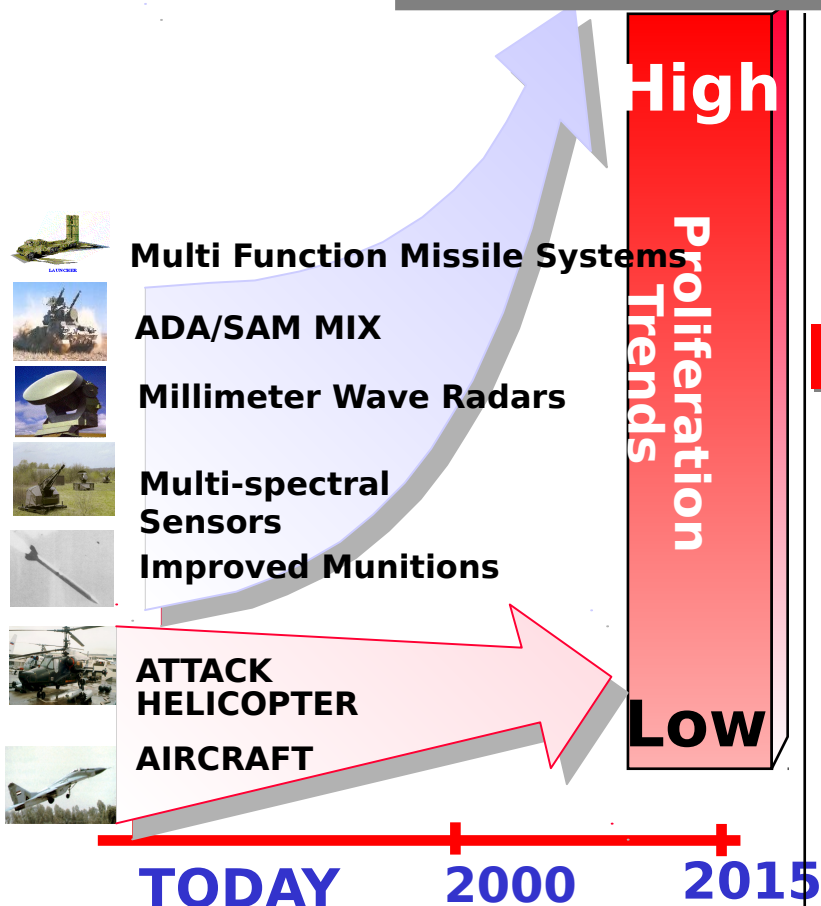


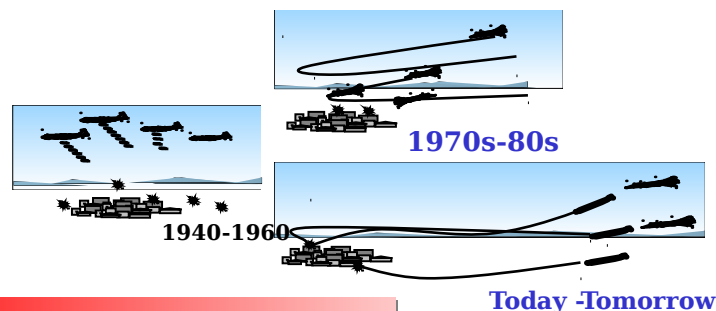
AIR DEFENSE THREAT (U)

WHY IT'S CHANGING



EVOLUTION CHARACTERIZED BY CHANGE IN THE TARGET SET

Applying Lessons Learned... Adoptive and Adaptive



Emerging Capabilities

Multi-spectral sensor integration

NOE/OTH Radar capability

Integration of gun and missile

Advanced munitions

Enhanced targeting

Emerging Strategies

Offensive in nature

Redundant C3I

Dispersed, Integrated, distributed and decentralized engagement

Mixed automated and manual tracking-- win war of weather

Maximum use of complex terrain

Air Defense not tied to troop formations...Air Defense Ambush

INCREASING RISK TO US FORCES



TACTICAL SYSTEM TRENDS

- ***Networked ADA Systems***
- ***Airburst Munitions***
- ***Advanced Signal Processing***
Improved Clutter Processing
Target Recognition
- ***Combination ADA/SAM Systems***
- ***Sensor Integration***
Radar/EO
- ***All Weather Targeting***



Strategies

Passive Intercept
Point Target Defense
Air Defense Ambush
Not Tied to Troops

RADAR TRENDS

- ***Millimeter Wave***
Reduce Ground "Clutter"
Hover detection
- ***Phased Array***
- ***Low Probability Of Intercept***
Low peak power
Frequency Modulated
High Operating Frequency
- ***Advanced Signal Processing***



Strategies

Complimentary Systems
Sensor Fusion



AIR DEFENSE MISSILE TRENDS

- **Dual Mode Seeker**
- **Salvos**
- **Multi-missile Tracking Capability**
- **Target Priority TBM, Cruise Missile and Aircraft**
- **Increased Range**



Strategies

Mobility

Target Airborne Radars

Increase US Air Force Stand-

Reduce Cruise Missile Threat